



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,218	06/05/2006	Shuichi Hirata	P29986	3667
52123 7590 08/15/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER KIM, PAUL D				
ART UNIT		PAPER NUMBER		
3729				
NOTIFICATION DATE		DELIVERY MODE		
08/15/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com

pto@gbpatent.com

Office Action Summary

Application No.

10/596,218

Applicant(s)

HIRATA ET AL.

Examiner

Paul D. Kim

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is a response to the amendment filed on 5/12/2008.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Re. Claim 15: The phrase "moving the head down by a predetermined distance at the second speed... wherein the predetermined distance is set at a first predetermined distance when the measured contact load is zero, and is set at a second predetermined distance when the measured contact load exceeds zero, the second predetermined distance being smaller than the first predetermined distance" as recited in lines 6-14 was not described in the specification in such a way as to enable one skilled in the art. Since the predetermined distance includes the first predetermined distance that is not contacted with the substrate and the second predetermined distance that is after the head is contacted with the substrate and the measured contact load at the second predetermined distance is not the predetermined target contact load, the

head is repeatedly moving down by the predetermined distance with the first predetermined distance and the second predetermined distance and measuring the contact load after the head is moved. However, when the head is repeatedly moving down by predetermined distance with the first predetermined distance and the second predetermined distance, the head has to be lifted with the first predetermined distance that is not contacted with the substrate and then moved by the second predetermined distance, that is contacted with the substrate, with the second speed. The head never be contacted and reached the predetermined target contact load when the moving and measuring processes are repeated.

Re. Claim 19: The phrase " when the measured contact load is the same as the previously measured contact load after the measured contact load exceeds zero, the measuring of the contact load is repeated until a different contact load is measured" as recited in lines 3-5 was not described in the specification in such a way as to enable one skilled in the art. Since the measured contact load, after the measured contact load exceeds zero, is not the predetermined target contact load, the head is repeatedly moving down by the predetermined distance with the first predetermined distance and the second predetermined distance. As explained set forth above, the head never be contacted and reached the predetermined target contact load when the moving and measuring processes are repeated.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re. Claim 15: The phrase "moving the head down by a predetermined distance at the second speed... wherein the predetermined distance is set at a first predetermined distance when the measured contact load is zero, and is set at a second predetermined distance when the measured contact load exceeds zero, the second predetermined distance being smaller than the first predetermined distance" as recited in lines 6-14 renders the claim vague and indefinite. Since the predetermined distance includes the first predetermined distance that is not contacted with the substrate and the second predetermined distance that is after the head is contacted with the substrate and the measured contact load at the second predetermined distance is not the predetermined target contact load, the head is repeatedly moving down by the predetermined distance with the first predetermined distance and the second predetermined distance and measuring the contact load after the head is moved. When the head is repeatedly moving down by predetermined distance with the first predetermined distance and the second predetermined distance, it is unclear as to how the measured contact load is reached to the predetermined target contact load. Because the head has to be lifted with the first predetermined distance that is not contacted with the substrate and then moved by the second predetermined distance, that is contacted with the substrate, with the second speed, the head never be

contacted and reached the predetermined target contact load when the moving and measuring processes are repeated.

Re. Claim 18: The phrase "a difference between the measured contact load and the target contact load" as recited in lines 3 and 4 renders the claim vague and indefinite. It is unclear as to whether this measured contact load is the same contact load that the measured contact load is zero or the measured contact load exceeds zero.

Re. Claim 19: The phrase "the measured contact load and the target contact load" as recited in line 3 renders the claim vague and indefinite. It is unclear as to whether this measured contact load is the same contact load that the measured contact load is zero or the measured contact load exceeds zero.

The phrase "when the measured contact load is the same as the previously measured contact load after the measured contact load exceeds zero, the measuring of the contact load is repeated until a different contact load is measured" as recited in lines 3-5 renders the claim vague and indefinite. Since the measured contact load, after the measured contact load exceeds zero, is not the predetermined target contact load, the head is repeatedly moving down by the predetermined distance with the first predetermined distance and the second predetermined distance. It is unclear how the head can be reached the predetermined target contact load when the moving and measuring processes are repeated.

Re. Claim 20: The phrase "wherein the predetermined distance is adjustably set such... target contact load" as recited in lines 3 and 4 renders the claim vague and indefinite. Since the measured contact load, after the measured contact load exceeds

zero, is not the predetermined target contact load, the head is repeatedly moving down by the predetermined distance with the first predetermined distance and the second predetermined distance. It is unclear how the head can be reached the predetermined target contact load when the moving and measuring processes are repeated.

NOTE: see attached drawing.

Response to Arguments

5. Applicant's arguments with respect to claims 15-21 have been considered but are moot in view of the new ground(s) of rejection.

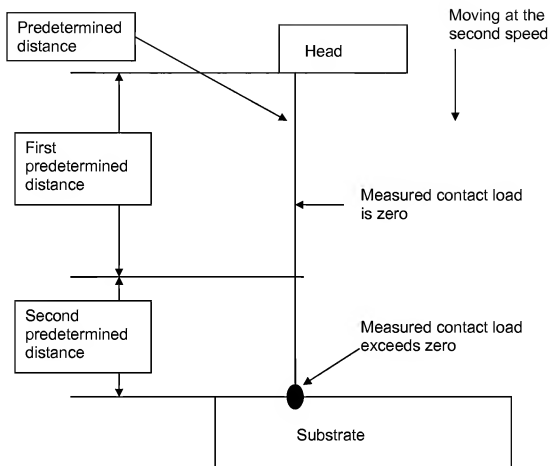
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Thursday between 6:00 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul D Kim/
Primary Examiner, Art Unit 3729



If the measured contact load that is exceeded zero is not the target contact load, then the moving step is repeated to go back to the predetermined distance such as the first predetermined distance where the measured contact load is zero.